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CULTIVAR TRIALS FOR NORTHERN OHIO

MUSKMELON
PICKLING CUCUMBER
MATURE RED, SWEET PEPPER

DALE KRETCHMAN, MARK JAMESON, CHARLES WILLER, MARK BENNET

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**MUSKMELON CULTIVAR EVALUATION TRIAL FOR
NORTHWESTERN OHIO, 1990**

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Nineteen cultivars and lines were evaluated in 1900 to determine their adaptability to northern Ohio conditions. The plots were located at the OARDC Vegetable Crop Branch near Fremont.

Seeds were sown in a commercial peat-vermiculite mix in 2 1/4 in. square peat pots on May 17. Two plants were grown in each pot and were field set on June 13. Prior to planting, the field received 700 lbs per acre of 6-24-24 and lightly incorporated. Rows were marked on 6 ft. centers. Four-ft. wide, 1.5 mil black plastic mulch was placed on the soil and plants planted through this mulch. Rows were 30 ft. long and the 2-plant pots spaced 30 in. apart. All other cultural practices followed regular commercial practice, including the addition of bees for pollination.

Rainfall was near normal for the production period and no supplemental irrigation was needed. Temperatures were, however, below normal which certainly affected plant development, fruit maturity and fruit quality. Rainfall was above normal for the latter part of the harvest and this did result in some fruit cracking, especially on the stem-end of the more susceptible cultivars.

Results are summarized in Tables 1-5. The soluble solids were measured with a hand refractometer and are the average of 3 fruits at each date. These fruits were selected as representative of the fruit harvested on that date. In general, sugars and flavor were not as high as in previous seasons with more normal temperatures.

All publications of the Ohio Agricultural Research and Development Center are available to all on a nondiscriminatory basis without regard to race, color, national origin, sex or religious affiliation.

11/90/H-464/400

TABLE 1. Harvest date and early yield of muskmelon cultivars -- Replicated Trial, Fremont, Ohio, 1990.

Cultivar	Seed Source	First Harvest date	Early Yield for Period 8/16-8/24		
			Marketable Fruit		
			cwt/A	Size (lbs)	% Culls
Road Runner	PS	8/20	5	2.4	58
Pulsar	PS	8/16	67	5.2	39
Starship	HM	8/24	20	3.0	76
Canada Gem	ST	8/24	3	1.1	75
Eastern Star	NK	8/20	29	5.1	50
Nova	NK	8/20	16	4.1	34
Argonaut	NK	8/24	11	3.4	39
Gold Star	HM	8/24	6	2.6	68
Cameo	A/AS	8/20	12	4.9	20
Legend	A/AS	8/24	3	1.1	75
Summit	A/AS	8/24	12	4.2	0
Tasty Sweet	SS	8/24	3	.7	88
Grand Gold	SS	8/24	0	---	100
Saticoy	PS	9/2	0	---	100
Super Star	HM	8/20	18	4.5	63
LSD .05			20	3.41	50

Table 2. Yield, grade, fruit size and fruit quality of muskmelon cultivars - Replicated Trial, Fremont, OH 1990.

Cultivar	Season Total Yield						
	Marketable Fruit			Fruit SS (%)		Flavor Rating*	
	Cwt/A	Size (lbs)	% Culls	8/27	8/31	8/27	8/31
Road Runner	445	4.5	24.5	11.8	10.7	3	3
Pulsar	376	5.3	33.2	10.1	10.4	2	2
Starship	584	5.7	20.4	10.8	10.7	2	2
Canada Gem	396	4.3	31.2	9.9	10.5	2	2
Eastern Star	458	5.8	20.7	8.1	8.9	3	3
Nova	495	5.4	18.3	8.5	8.8	3	3
Argonaut	431	4.7	19.5	12.2	8.3	2	3
Gold Star	403	4.2	27.5	10.6	8.3	1	1
Cameo	461	4.5	22.2	10.6	8.8	1	3
Legend	433	4.3	25.4	10.7	9.9	2	3
Summit	313	3.9	28.4	10.7	10.3	2	3
Tasty Sweet	417	3.4	31.4	8.4	11.3	4	2
Grand Gold	358	3.1	27.9	8.0	8.1	3	3
Saticoy	229	4.3	23.7	12.4	13.9	4	2
Super Star	537	5.7	18.4	7.1	9.3	3	3
LSD .05	107	.31	----	----	----	--	--

*Flavor Rating: 1 = excellent muskmelon flavor; 2 = sweet to very sweet; 3 = bland or flat; 4 = off-flavor (usually undesirable).

Table 3. Harvest date, and early yield of muskmelon cultivars - Observational Trial, Fremont, Ohio - 1990.

Cultivar	Seed Source	First Harvest date	Early Yield for Period 8/18-28		
			Marketable Fruit		
			cwt/ A	Size (lbs)	% Culls
HMX-7601	HM	8/29	0	0	0
Eastern Star	MS	8/24	17	6.9	0
85M104	MS	8/18	83	3.1	32.7
Westar	MS	8/29	0	0	0

Table 4. Yield, grade, fruit size and fruit quality of muskmelon cultivars - Observational Trial, Fremont, Ohio - 1990.

Cultivar	Season Total Yield			Fruit SS (%)		Flavor Rating*	
	Marketable Fruit						
	Cwt/ A	Size (lbs)	% Culls	8/27	8/31	8/27	8/31
HMX-7601	208	4.5	21.7	---	8.7	1	3
Eastern Star	149	5.7	18.2	7.1	7.5	3	4
85M104	273	3.6	27.6	7.1	8.8	3	3
Westar	255	4.2	28.4	---	8.7	2	2

*Flavor Rating: 1 = excellent muskmelon flavor; 2 = sweet to very sweet; 3 = bland or flat; 4 = off-flavor (usually undesirable).

Table 5. External and internal quality evaluation.

Cultivar	Comments
Road Runner	Sutured, deep, moderately heavy netting, slight stem-end cracking, salmon flesh, large seed cavity, tough texture, bland flavor.
Pulsar	Moderate shallow netting, round, stem-end cracks, prominent green suture, light salmon flesh, small to medium seed cavity, good flavor.
Starship	Deeply sutured, heavy deep netting round, excellent appearance as an eastern melon, light salmon flesh, moderately sized seed cavity, numerous fruits with openings into the stylar end of the fruits--appeared to be a disease organism present which was not identified, sweet with good melon flavor.
Canada Gem	Moderately deep netting, sutured, light salmon flesh, large seed cavity, fair to good melon flavor.
Eastern Star	Shallow sutures, shallow light netting, protruded stem-end with small cracks present, very poor appearing melon-shape, cracks; light salmon flesh, medium cavity, bland flavor.
Nova	Shallow sutures, heavy deep netting, slightly oblong, western type melon, light salmon flesh, small seed cavity, opening into stylar end, slightly off flavored.
Argonaut	Green sutures, deep heavy netting; round, cracks over fruit and especially at stem-end, salmon flesh, small seed cavity, very sweet with no melon flavor.
Gold Star	Deep sutures, heavy deep netting, round, considered a standard for eastern type melons, salmon flesh, medium-large seed cavity, excellent flavor.
Cameo	Green sutures, deep heavy netting, oblong, light salmon flesh, moderate to large seed cavity, stylar end open on many fruits, good melon flavor.
Legend	Deep sutures, moderate netting, oblong, slight cracking at stem end, great variability in fruit size, some fruits with exceptionally large stem scar, salmon flesh, moderate to large seed cavity, good melon flavor, firm flesh.
Summit	Deep sutures, moderate netting, round, deep salmon flesh, small seed cavity, good melon flavor although a bit tough.

Table 5. External and internal quality evaluation. (cont.)

Cultivar	Comments
Tasty Sweet	Non-sutured, fine, heavy netting, round, western type melon, salmon flesh, small seed cavity, grainy, off flavor.
Grand Gold	Shallow sutures, fine heavy netting, round, western type, salmon flesh, small to medium seed cavity, hard melon, bland flavor.
Saticoy	Very shallow sutures, thick shallow netting, protruding stem-end, flat blossom end, dark salmon flesh, large seed cavity, very sweet but no melon flavor, very late.
Super Star	Sutured, light to moderate netting, slightly cracked at stem-end, generally round but poor size uniformity, a second standard melon, light salmon flesh, moderate to large seed cavity, fairly good melon flavor, although some fruits were bland.
HMX-7601	Sutured, heavily netted, round salmon flesh, large seed cavity, good to bland melon flavor.
Eastern Star	Sutured, lightly netted, protruding stem, slightly oblong, slight cracking at stem end, light salmon flesh, large seed cavity, poor interior quality with distasteful off-flavor. not adapted to Ohio conditions.
85M104	Protruding stem end, shallow sutures, moderately deep netting, light salmon flesh, large seed cavity, bland and undesirable after-taste, not worthy of further trial in Ohio.
Westar	Shallow, scattered netting, oblong, protruding stem-end, light salmon flesh, large seed cavity, sweet watery flavor, not impressive.

PICKLING CUCUMBER CULTIVAR EVALUATION TRIALS IN OHIO

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The pickling cucumber trials were conducted at the OARDC Vegetable Crops Branch near Fremont. Sixteen cultivars were evaluated in the replicated trial and 18 entries were observational trial.

Cultural Information

The soil is classed as a sandy loam. A broadcast application of 6-24-24 at 700 lbs/A was made and incorporated prior to planting on June 12, 1990. A Stan-Hay seeder was used. The stand was thinned to give a uniform spacing of 2 single plants per foot of row. Rows were 30 ft. long on 30 in. centers. Alanap and Prefar were applied as recommended for weed control. One active hive of bees was placed in the plot area when the plants started to bloom. All other cultural practices were according to recommended practices and were uniform throughout the plots. No serious weed, insect or disease problem occurred throughout the season.

The plots were harvested by hand and the cucumbers graded and sized using a commercial sizer. Fruits were classed into the following size and value categories:

Size	\$/Ton*	
	PCIC	OHIO
1. Less than 1 1/16 in.	120	300
2. 1 1/16 to 1 1/2 in.	60	170
3. 1 1/2 to 2 in.	40	90
4. 2 to 2 1/4 in.	20	20

Harvest started July 27 and ended about August 14 with pickings twice weekly for 6 pickings for all entries except Little Leaf, which ran from August 7 through August 23 for 6 pickings.

Growing conditions were generally good with slightly below normal temperatures and near normal rainfall for the cucumber production period. Supplemental irrigation was not necessary this season.

Results are given in Tables 1 through 7.

*PCIC values established by the Pickling Cucumber Improvement Committee of Pickle Packers International. Ohio values based upon estimated average prices paid in 1984-85.

TABLE 1. Yield from replicated trial of pickling cucumber cultivars, 1990.

Line	Yield from 6 harvest dates - Tons/A							L/D Ratio		Seed cavity size*
	7/27	7/31	8/3	8/7	8/10	8/14	Total	7-31 Size 2	8-14 Size 2	
Regal	1.10	3.32	.83	2.81	.82	2.43	11.31	3.20	3.10	+
Royal	.85	3.88	.99	3.14	1.10	3.28	13.24	3.06	3.03	=
Pik Rite	.36	3.59	.85	3.37	1.52	3.65	13.33	2.80	2.82	-
Spear IT	.23	3.46	.88	3.64	1.33	3.66	13.20	2.93	3.10	=
Cross Country	.56	3.22	.56	2.89	.87	3.01	11.11	2.97	3.21	=
Carolina	1.02	3.96	.77	3.24	1.04	2.90	12.93	3.00	2.74	*
Picklemech	.78	2.84	1.00	3.09	1.31	4.18	13.20	3.06	3.20	=
Discover	1.53	3.60	.67	2.45	.89	2.77	11.91	3.20	3.48	=
Discover M	1.97	4.01	.65	3.33	1.06	2.72	13.74	3.23	3.41	+
Magic	.38	3.33	1.20	3.29	1.36	2.97	12.53	3.24	3.28	=
Flurry	1.41	4.17	.74	2.63	.82	2.56	12.33	3.03	3.00	+
Flurry M	1.42	3.85	.89	3.86	.99	2.90	13.91	3.07	3.03	+
Calypso	.67	4.33	.73	4.16	.96	3.57	14.42	2.83	3.18	=
Lucky Strike	.85	3.01	.82	3.56	1.01	2.45	11.70	2.93	2.93	-
Fancipak	.09	2.21	1.28	3.47	1.29	3.64	11.98	3.08	2.96	=
Little Leaf**	.35	1.03	5.46	1.66	3.22	5.79	17.51	2.96	3.06	-
LSD .05	.40	1.05	.50	.89	.59	.87	2.02	--	--	

*Seed cavity size compared to Carolina: "=" Same size; "+" larger, and "-" smaller.

**Harvested 8/7, 8/10, 8/14, 8/16, 8/20, 8/23.

Table 2. Value of harvested cucumbers from replicated trial based on PCIC values, 1990.

Line	PCIC Value of 6 Harvest Dates - \$/A							Seed Source
	7/27	7/31	8/3	8/7	8/10	8/14	Total	
Regal	109	196	60	176	67	142	750	HM
Royal	82	236	68	207	79	180	852	HM
Pik Rite	37	209	64	208	94	202	814	FM
Spear IT	23	202	61	233	89	205	813	FM
Cross Country	48	209	45	196	61	171	730	FM
Carolina	83	223	65	190	71	152	784	PS
Picklemech	64	203	85	208	103	244	907	NK
Discover	122	219	59	156	70	158	784	A/AS
Discover M	153	234	54	197	78	156	872	A/AS
Magic	30	203	98	212	112	167	822	A/AS
Flurry	116	220	64	163	70	140	773	A/AS
Flurry M	114	232	72	226	79	163	886	PS
Calypso	64	263	53	258	65	210	913	PS
Lucky Strike	71	185	62	209	79	137	743	A/AS
Fancipak	8	165	91	215	98	220	797	A/AS
Little Leaf (H-19)*	23	100	341	116	239	360	1179	PS
LSD .05	35	53	33	52	40	54	140	

*Harvested 8/7, 8/10, 8/14, 8/16, 8/20, 8/23.

Table 3. Value of harvested cucumbers from replicated trial based on Ohio values, 1990.

Line	Ohio Value of 6 Harvest Dates - \$/A						Total
	7/27	7/31	8/3	8/7	8/10	8/14	
Regal	279	502	155	459	171	370	1936
Royal	211	601	177	548	202	456	2195
Pik Rite	96	541	168	549	232	521	2107
Spear IT	60	513	157	617	227	526	2100
Cross Country	128	538	117	525	156	433	1897
Carolina	217	569	166	498	186	383	2019
Picklemech	169	524	221	547	257	628	2346
Discover	323	555	153	408	176	409	2024
Discover M	402	600	140	512	194	406	2254
Magic	79	521	249	556	289	429	2123
Flurry	304	550	161	433	178	358	1984
Flurry M	300	599	181	589	203	424	2296
Calypso	165	682	139	683	165	535	2369
Lucky Strike	188	479	159	541	203	354	1924
Fancipak	21	419	241	566	250	570	2067
Little Leaf*	<u>57</u>	<u>256</u>	<u>900</u>	<u>302</u>	<u>623</u>	<u>917</u>	<u>3055</u>
LSD .05	89	131	83	136	100	146	372

*Harvested 8/7, 8/10, 8/14, 8/16, 8/20, 8/23.

TABLE 4. Yield from observational trial of pickling cucumber cultivars, 1990.

Line	Yield from 6 harvest dates - Tons/A							L/D Ratio		Seed cavity size*
	7/27	7/31	8/3	8/7	8/10	8/14	Total	7-31 Size 2	8-14 Size 2	
PS-50885	1.25	4.56	.78	4.33	1.02	5.17	17.11	3.17	3.31	=
PSX-10588	2.03	3.63	.99	3.28	.96	2.76	13.65	3.18	2.88	=
PS-50183	.76	2.53	.52	3.28	1.54	4.65	13.28	2.91	3.14	+
PSX-10488	1.22	4.65	.55	3.43	.81	5.05	15.71	2.90	3.15	+
3733 x 6226	.15	1.74	.58	4.53	.87	7.78	15.65	3.00	3.00	=
FMX-4448	.32	2.50	.78	2.90	.87	3.80	11.17	2.83	3.10	+
FMX-4920	1.10	1.95	.61	2.85	1.34	4.56	12.41	2.94	2.66	=
FMX-4921	.76	1.07	.44	3.02	.81	3.86	9.96	3.00	2.86	=
HMX-6465	1.60	2.61	.44	2.93	1.19	2.70	11.47	3.00	3.27	=
HMX-3476	1.66	3.80	1.07	3.19	1.92	5.49	17.13	3.09	3.41	-
HMX-6466	.64	7.09	.17	3.63	2.73	2.44	16.70	2.87	2.95	-
Sunre-3528	.81	4.59	.26	3.75	.90	3.43	13.74	2.68	2.90	=
Sunre-3533	.15	2.27	.12	2.87	1.80	3.80	11.01	2.70	2.87	+
Raleigh	.81	4.59	.20	2.73	1.10	3.08	12.51	3.00	3.14	=
Express & Addis	1.13	4.18	.55	3.78	1.68	2.82	14.14	2.81	3.21	=
Esther	1.05	3.72	.46	2.21	.84	1.28	9.56	2.80	3.06	=
Anuschka	.06	1.89	.58	3.08	1.34	3.48	10.43	2.66	2.83	=
Claudia	.55	3.22	.93	2.38	1.22	3.34	11.64	2.88	2.77	+

*Seed cavity size compared to Carolina: "=" same size; "+" larger; "-" smaller.

Table 5. Value of harvested cucumbers from observational trial based on PCIC values, 1990.

Line	PCIC Value of 6 Harvest Dates - \$/A						Total	Seed Source
	7/27	7/31	8/3	8/7	8/10	8/14		
PS-50885	99	304	84	288	84	287	1146	PS
PSX-10588	172	256	90	199	88	193	998	PS
PS-50183	54	169	52	214	122	268	879	PS
PSX-10488	111	265	56	229	80	303	1044	PS
3733 x 6226	17	129	52	275	86	407	966	WIS*
FMX-4448	35	194	43	168	55	189	684	FM
FMX-4920	88	140	49	192	102	211	782	FM
FMX-4921	59	86	35	178	75	191	624	FM
HMX-6465	152	193	39	192	78	146	800	HM
HMX-3476	150	246	93	211	145	320	1165	HM
HMX-6466	61	348	14	221	123	139	906	HM
Sunre-3528	63	229	17	215	59	167	750	SS
Sunre-3533	14	151	10	172	109	214	670	SS
Raleigh	75	252	22	186	82	181	798	NK
Express & Addis	89	249	51	235	96	140	860	NK
Esther	88	237	38	156	75	78	672	RS
Anuschka	7	131	54	204	109	226	731	RS
Claudia	49	288	97	179	115	217	945	RS

*Univ. of Wisc., Dept. of Hort.

Table 6. Value of harvested cucumbers from observational trial based on Ohio values, 1988.

Line	Ohio Value of 6 Harvest Dates - \$/A						Total
	7/27	7/31	8/3	8/7	8/10	8/14	
PS-50885	265	791	212	769	212	745	2994
PSX-10588	445	662	227	524	225	505	2588
PS-50183	141	438	134	560	318	699	2290
PSX-10488	290	666	143	608	200	780	2687
3733 x 6226	43	339	136	701	219	1058	2496
FMX-4448	88	502	113	432	138	472	1745
FMX-4920	232	376	130	486	264	507	1995
FMX-4921	158	226	92	456	192	474	1598
HMX-6465	391	499	100	502	202	380	2074
HMX-3476	384	632	241	551	363	835	3006
HMX-6466	158	851	37	593	269	358	2266
Sunre-3528	167	558	42	558	152	421	1898
Sunre-3533	36	390	27	457	276	556	1742
Raleigh	195	633	55	495	208	465	2051
Express X Addis	237	633	133	632	225	353	2213
Esther	230	597	98	417	196	215	1753
Anuschka	17	338	140	546	279	598	1918
Claudia	127	591	248	464	298	562	2290

TABLE 7. Additional observations.

Cultivar or Line	Comments
Regal	Light green, stippled, restricted blossom-end, long, warty
Royal	Dark green, slight stippling, warty, restricted at both ends.
Pik Rite	Med. green, stippled, warty, restricted at blossom-end, short.
Spear It	Light green, stippled, warty.
Cross Country	Dark green, stippled, warty, fairly blocky.
Carolina	Light to dark green, stippled, warty, restricted at blossom-end.
Picklemech	Light green to dark green, very warty, fairly blocky.
Discover	Light to dark green, warty, restricted at both ends.
Discover M	Medium to dark green, stippled, slightly restricted at both ends.
Magic	Light to dark green, stippled, warty, fairly blocky.
Flurry	Medium to dark green, stippled, warty, slightly restricted at both ends.
Flurry M	Light to dark green, warty, very slightly restricted at stem end.
Calypso	Medium green, stippled, very warty, slightly restricted at blossom-end.
Lucky Strike	Medium to dark green, stippled, warty, moderately restricted at blossom-end.
Fancypak	Medium green, warty, blocky, very blocky uniform shape.
Little Leaf	Dark green, warty, restricted at both ends.
PS-50885	Light to dark green, stippled, warty, very slightly restricted at blossom-end, looks promising.
PSX-10588	Medium to dark green, warty, slightly restricted at blossom-end, long.

TABLE 7. Additional observations. (cont.)

Cultivar or Line	Comments
PS-50183	Medium to dark green, warty, stippled, slightly restricted at blossom-end.
PSX-10488	Medium to dark green, warty, stippled, slightly restricted at blossom-end.
3733 x 6226	Medium green, stippled, warty, moderately restricted at blossom-end.
FMX-4448	Medium to dark green, warty, severely restricted at blossom-end, shape is not acceptable.
FMX-4920	Light to medium green, warty, slightly restricted at blossom-end.
FMX-4921	Light to dark green, severely restricted at blossom-end.
HMX-6465	Light green, stippled, warty, moderately restricted at blossom-end, long.
HMX-3476	Light to medium green, stippled, warty, severely restricted at blossom-end.
HMX-6466	Medium green, stippled, warty, slightly restricted at blossom-end.
Sunre-3528	Light to dark green, warty, severely restricted at blossom-end.
Sunre-3533	Light to medium green, warty, severely restricted at blossom-end.
Raleigh	Medium to dark green, stippled, warty, slightly restricted at blossom-end.
Express & Addis	Light to dark green, stippled, warty, blocky.
Claudia	Dark green, restricted at blossom-end, fuzzy.
Esther	Medium to dark green, slightly restricted at blossom-end, fuzzy.
Anuschka	Medium green, warty, moderately restricted at blossom-end.

MATURE RED, SWEET PEPPER CULTIVAR TRIALS FOR NORTHWESTERN OHIO, 1990

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Twenty-seven cultivars and lines of sweet peppers which are red at maturity, were evaluated for adaptability to Ohio environmental conditions in 1990. In addition, 7 lines were evaluated in a non-replicated observational trial. The primary purpose was to provide a selection of cultivars suitable for processing as red-ripe sweet peppers. A bell or semi-bell shape and thick fruit walls were desirable characteristics.

The plots were established at the OARDC Vegetable Crops Branch near Fremont. The plants were grown in the greenhouse and transplanted on May 30. Plots were 30 ft. long with 30 in. between rows and 18 in. between plants. The plots were fertilized with 600 lb/A of 10-20-20 prior to planting. All cultural practices were according to general recommendations and uniform. Because of the large number of entries, the replicated trial had only duplicate plots.

The first harvest was on Sept. 11 and the red and rotted fruits were picked, counted and weighed. The final harvest was done on Oct. 4 and the red and green fruits were counted and weighed. The rotted fruits were not picked--there were many rotted fruits because of the very wet, cool conditions during late September and early October.

This was not an easy season to produce red-ripe sweet peppers because of the below normal temperatures all season and above normal rainfall during fruit maturation. There were many fruits that just "melted" away, although some cultivars appeared to "survive" better than others.

Results are summarized in Tables 1, 2 and 3.

Table 1. Yields from replicated red-ripe pepper trials, OARDC Vegetable Crops Branch, Fremont, OH 1990.

Cultivar	Seed source	Yield Tons/Acre				Total red	Wall thickness (mm)
		Harvest 9/11 red	9/11 culls	Harvest 10/4 red	10/4 green		
Keystone Res't Giant #4	PS	5.5	1.1	0.8	3.0	6.3	7.3
Sweetheart 901	AC	2.5	0.1	1.7	3.4	4.2	7.7
Cardinal	ST	8.4	1.2	2.4	3.0	10.8	6.7
Bell Captain	PS	3.9	1.2	1.2	2.5	5.1	6.3
Candice	ST	8.4	0.7	2.4	4.0	10.8	6.0
Red Wing	ST	7.4	1.3	1.1	5.9	8.5	6.3
Elisa	NK	5.7	0.9	2.2	4.0	7.9	6.0
Memphis	NK	4.5	1.4	1.7	3.4	6.2	7.6
Argo	ST	7.3	1.2	1.5	4.9	8.8	5.6
Domino	A/AS	7.8	1.4	2.8	7.3	10.6	6.3
Melody	A/AS	5.0	1.1	3.5	5.3	8.5	6.0
Verdel	NK	3.2	1.4	0.9	3.4	4.1	6.3
Bombay	NK	4.3	1.1	2.5	2.7	6.8	7.3
Clovis	NK	3.1	0.9	4.0	2.8	7.1	9.0
Pep 9143	NK	1.1	0.6	2.5	3.0	3.6	7.0
LaBomba	HM	2.0	1.1	1.9	4.0	3.9	6.6
FMX-1032	FM	3.3	0.9	3.8	2.5	7.1	6.3
FMX-1036	FM	4.0	0.6	2.1	2.2	6.1	7.0
Marlin (PSX-20683)	PS	5.8	1.0	2.3	4.1	8.1	7.3
Biscayne	PS	4.7	0.8	2.4	6.1	7.1	4.7
Ace	JS	8.0	1.1	3.7	2.3	11.7	5.3
JX-894	JS	9.2	1.4	2.0	4.8	11.2	6.7
Ringer	JS	9.5	0.9	1.7	4.5	11.2	6.6
Northern Star	PS	10.4	0.8	2.9	3.1	13.3	6.0
Capistrand	PS	5.4	0.8	2.3	1.8	7.8	7.7
Camelot	PS	2.6	0.4	2.9	3.8	5.5	7.0
Gater Belle	PS	7.4	1.0	4.2	2.7	11.6	6.7
LSD .05		2.32	---	---	---	3.35	---

Table 2. Yield from observational red-ripe pepper trials, OARDC Vegetable Crops Branch, Fremont, OH 1990.

Cultivar	Seed source	Yield Tons/Acre				Total red	Wall thickness (mm)
		Harvest 9/11 red	9/11 culls	Harvest 10/4 red	10/4 green		
HMX-7648	HM	7.3	1.0	1.9	1.8	9.2	5.3
HMX-7660	HM	8.3	0.7	6.2	6.2	14.5	6.0
FMX-1031	FM	5.3	0.8	1.9	1.3	7.2	8.7
FMX-1035	FM	4.9	1.9	2.7	4.2	7.6	6.3
Whopper Improved	NK	8.8	0.5	3.7	6.5	12.5	9.3
XPH-5693	A/AS	7.3	0.3	2.9	5.7	10.2	7.7
Sunex-4500	SS	5.7	0.6	2.7	3.5	8.4	7.3
Pak Bell (Sunex 4503)	SS	1.7	1.1	0.0	2.4	1.7	7.3

Table 3. Additional observations on pepper cultivars.

Cultivar	Comments
Keystone Resistant Giant #4	Plants upright, fruit color-light to dark red, fruits 3 to 4 lobed, blocky to pointed, considerable anthracnose infection, many fruits completely broken down at last harvest.
Sweetheart 901	Plants very upright, heart-shaped, very firm fruits.
Cardinal	Plants comparatively upright, fruits 3-4 lobed, blocky with some fruits short and blocky.
Bell Captain	Plants upright, very large fruit, poor uniformity, deep blossom-end indentations, some 2-locule fruits, much fruit rot.
Candice	Plants nearly prostrate with fruit load, long bright red fruits, mostly 2-3 locules, fruits smooth and uniform, looks promising.
Red Wing	Plants upright, fruits very large, light to dark red color, very odd-shaped, 2 to 4 locules, crooked fruit.
Elisa	Plants upright to nearly prostrate, long light to dark red fruit, considerable fruit rot, 3-4 locule fruit.
Memphis	Plants upright to nearly prostrate, blocky dark red fruits, some rotted fruits.
Argo	Very large upright plants, very long fruits mostly 3-4 locules, light to very dark red.
Domino	Plants prostrate, very large long fruit, 3-4 locules, medium dark red, fairly uniform shape.
Melody	Large upright plants, large long fruits, light to dark red, 3-4 prominent locules, fruit shape not uniform.
Verdel	Plants large with many plants prostrate, short blocky fruits, light to dark red, many rotted fruits.
Bombay	Plants upright, fruits short and fairly blocky with 3-4 locules, light to dark red, considerable rotted fruits.
Clovis	Short upright plants, blocky 4 locule dark red fruits, many rotted fruits.

Table 3. Additional observations on pepper cultivars. (cont.)

Cultivar	Comments
Pep 9143	Very large plants, very large long 3 locule fruits, highly susceptible to fruit rots, very late maturity.
LaBomba	Upright to prostrate plants, plants very brittle, large long fruits, light to dark red, very late and many rotted fruits.
FMX 1032	Large upright plants, fruits from chocolate to light red, blocky 3-4 locules, considerable fruit rots.
FMX 1036	Upright plants, blocky chocolate to red fruits, 3-4 locules, medium sized fruits, smooth blossom-end.
Merlin	Upright to prostrate plants, short blocky fruits, 3-4 prominent locules, bright dark red, moderate fruit rots.
Biscayne	Upright to prostrate plants, prolific, bright red, very long, extremely crooked fruits.
Ace	Fairly upright plants, fruits very soft when red, considerable fruit rots, prominent 3-4 locule fruits, long fruits.
JX 894	Fairly upright plants, bright red fruits. Short 3-4 locules, very large stem on fruits, considerable fruit rots.
Ringer	Upright to prostrate plants, large moderately long 2-4 locule fruit, bright dark red fruits, concentrated maturity, very few rotted fruits, looks promising.
Northern Star	Mostly prostrate brittle plants, long to short and blocky, 2-4 locule fruit, lacks uniformity.
Capistrand	Short upright plants, large blocky, 2-4 locule fruits, light to dark red, many rotted fruits.
Camelot	Large upright plants, large long to blocky 2-4 locule fruits, many rotted fruits.
Gater Bell	Upright to prostrate plants, long to blocky fruits, light to dark red, poor uniformity in shape, many rotted fruits.

Table 3. Additional observations on pepper cultivars. (cont.)

Cultivar	Comments
HMX-7648	Very prostrate plant, med-long 3-4 locule fruit, bright red, fairly concentrated set, fair uniformity, slight amount of rotted fruits.
HMX-7660	Prostrate, sturdy plants with heavy fruit load, yellow immature to bright red ripe, concentrated set, fairly uniform shape, with some blocky and some pointed fruits, very few rotted fruits, looks promising.
FMX-1031	Prostrate plants, small blocky, 3-4 locule fruit, bright to dark red, some fruits with blossom-end rot.
FMX-1035	Prostrate plants, very short blocky, 3-4 locule fruit, bright red fruits, plants very brittle.
Whopper Improved	Plants mostly prostrate, large 3-4 locule fruit, light to dark red, blocky, fairly uniform fruits.
XPH-5693	Prostrate plants, large 3-4 locule chocolate to dark red fruit, fairly uniform pointed to blocky shape, worth further evaluation.
Sunex 4500	Prostrate plants, large 3-4 locule chocolate to dark red fruit, fairly uniform size.
Pak Bell	Upright plants, large blocky irregularly shaped fruits, color is blotchy, not impressive.

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